# Nicotine withdrawal and the human brain:

## Finding new ways to predict and improve smoking treatment success

STUDY 474

NICOTINE STUDY

### What is the purpose of the research study?

- To learn what happens in the brain when people stop smoking for 36 hours
- To learn whether the changes that occur in the brain when people temporarily stop smoking can predict whether they will successfully quit smoking following treatment

### Who can participate in the study?

This study is accepting men and women who

- Are 18 to 55 years of age
- Are in generally good health
- Are currently smoking and want to quit

### What will participants be asked to do?

The study consists of 3 phases

- Phase 1: 3 visits over 3-5 weeks
  - Have an MRI scanner take pictures of their brain
  - Complete questionnaires and tasks, some done while in the scanner
  - Be asked to stop smoking for two 36-hour periods
  - Wear a nicotine patch or placebo (patch with no nicotine in it) during one of the quit periods
  - Give urine and blood samples
- Phase 2 (Treatment): 13 visits over 12-15 weeks
  - Participate in weekly counseling sessions
  - Take varenicline (also known as Chantix) daily for 12 weeks
  - Complete questionnaires
- Phase 3: 3 visits at 1, 6 and 12 months after the last treatment visit
  - Have an MRI scanner take pictures of their brain
  - Give urine samples
  - Complete questionnaires

### Where is the study taking place?

The NIDA Intramural Research Program is located on the Johns Hopkins Bayview campus in east Baltimore.

### Will there be any cost to participate?

There is no cost for participation.

### Will participants receive payment of some kind?

All study participants will be paid for their time and travel.

### How can I find out if I'm eligible to participate?

Call 1-888-OUR-BRAIN (1-888-687-2724) for a confidential screening.